HEALTH

EDITED BY

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Notes by the Way

"Health is the foundation of all our physical happiness."—*Herder.*

The "wart" question still agitates the minds of many readers. Doubtless "warts" may be described as social nuisances; and, in the interests of health (and beauty), we are quite willing to give our correspondents plenty of rope in the ventilation of their views. From a mass of letters, we select the following as a fair sample of a wart cure of a sensible kind enough. A persistent wart, which had resisted all ordinary remedies, was cured by making a very strong solution of common washing-soda, and by applying this fluid night and morning to the wart. Our correspondent adds that he supposes the soda kept the wart moist, and thus caused it to disappear; but he ought to know that soda is a caustic of mild type, and that his treatment was similar in its nature to that illustrated by applying ordinary "caustic" to the growth. After all, this great "wart question" seems to teach us, from a new standpoint, the truth which is contained in the opinion that individual differences form a very important element in determining success or failure of medical treatment. That "what is one man's meat is another man's poison" is, of course, a familiar piece of proverbial philosophy; and it would appear as though that which cures a wart in one person—"charming," saliva, and the other faith-cures included—may be inefficacious in another patient. Here, as elsewhere, the true solution of the difficulty is to be found in the discovery of the remedy—mental or physical—which is best adapted to the individual case.

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Another case of poisoning by quack-medicines! A boy, nine years old, lately died at St. Helens from a dose of a fluid called "Indian Tincture," purchased by his mother from a grocer. Death was discovered to be due to some form of narcotic poisoning. The grocer from whom this medicine was obtained produced the bottle from which he dispensed the "tincture." It bore that the tincture was "admirably adapted for everybody" as a remedy for coughs, colds, &c. A graduated scale of doses was also appended, from which it appeared that the mother had given her boy a strong overdose of the medicine. The grocer admitted that he had not said anything about the dose to the mother, as he imagined she knew its power, the "tincture" being a "common medicine." The "tincture" was said to be a mixture of Indian hemp and ether—two compounds in themselves requiring cautious administration. We learn, once again, the bitter lesson taught by the present state of the law regarding the sale, by unqualified persons, of dangerous remedies. Even in the case of an ordinary "patent" medicine sold by a druggist, the bottle would have been duly labelled and the correct dose indicated. As it was, the grocer dispensed a poisonous mixture without directions, and furthermore declared that "there was no maker's name on the bottle, that it came from Daubhill, near Bolton, and that he did not know the name of the man who brought it." Further comment on such a state of matters is absolutely needless.

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The subject of "Provident Dispensaries" is one worthy the attention of all interested in the ready obtaining by the masses of sound medical advice at a fair rate and charge. The Fourth Annual Report of the West Cheshire Provident Dispensaries lies before us, and from its pages we are glad to see that a prosperous career attends this association. The list of names constituting the committee and officers is a guarantee of the high character of the institution. The working-classes avail themselves largely of the advantages presented by the dispensaries; and by payment of a small sum, secure efficient medical advice, avoid quackery and all its risks, and further ensure that medical men obtain remuneration for their services. The problem of the "unpaid doctors' bill" seems thus to be practically solved for the masses.

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The scale of monthly payments in force at these dispensaries is as follows:—For each person above sixteen years, 3d.; for man and wife, 10d.; each child up to three years, 2d.; a widow, 4d.; each child of a widow up to three years, 1d.; and members of sick benefit societies, 4d. Not more than three children are charged for in one family; and persons whose income exceeds 40s. per week are not eligible for membership. This latter provision strikes at the root of all abuse in the operations of such a scheme. Payments are made in advance. Not the least important part of the scheme is expressed in the idea that if working people know they can secure the attendance of the doctor at all times, they may thus check the inroads of disease and prevent the development of many serious ailments. There is no nobler scheme of health-help in existence than "Provident Dispensaries"; and we shall gladly do all in our power to aid the extension of such a movement in districts not yet supplied with these institutions. Better far to encourage the masses to support such a scheme than through any neglect or discouragement of its principles, to foster quackery, and to make the masses dependent for medical aid on a charity which saps at the root of all independence.

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We have pleasure in calling attention to the work of the "Association for Promoting Trained Nursing in Workhouse Infirmaries," the Honorary Secretary of the institution being Miss Wilson, 42, Powis-square, London, W. As we intend very shortly to begin the publication in Health of a series of "Lectures on General Nursing," by Dr. Allchin, Physician to the Westminster Hospital and to the Westminster Training School for Nurses, we may here express our warmest interest in the nursing profession, and in the great and important work the nurse is now trained and educated to effect. It has been contemplated to begin in the pages of Health a "Nurse's

Column" for the ventilation of matters dealing with the topic of "Nursing," and we shall be glad of the co-operation of those of our readers interested in this question in making known to the profession this intent. By the aid of the papers on "The Body and its Structure," already published, and of those to come—as well as by the publication of all information likely to interest not only nurses themselves, but mothers and others occupying the responsible position of heads of households—we hope to increase, in still further measure, the usefulness of Health.

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A curious return, showing how the sad side of human life ends its days in Paris, has just been published. The number of suicides in Paris during the past year was 542, being 63 more than the previous year. The favourite method of death was that by firearms; 217 persons having perished in this way. There were 148 cases of drowning, 81 of hanging, and 37 deaths were caused in the typically French method of burning charcoal in a close room. The remaining 51 cases included suicides by jumping from a height, by poison, and by throwing the person in front of trains and vehicles. There is a grim ingenuity and expression of choice illustrated in such an account of these varied modes of ending life; but who can form any idea of the sadness, misery, and pain of body and mind alike which prompted to the accumulation of such a record of ill-fated ends?

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The "heathen Chinee" has generally been regarded as a person given to many wheedling practices; and Bret Harte's character of Ah Sin in his well-known poem has doubtless done much to foster a belief in the "ways that are dark and tricks that are vain" of the Celestial Empire. But, according to the *New York Medical Record*, the Chinaman is a docile patient, and always pays his doctor's bills—a feature in which he might, with advantage, be imitated, to a greater extent than is usual, by western civilisation. He is also said to be a cleanly person, and to be scrupulously attentive to all medical directions when disease invades his dwelling. It is clear that the Chinese are not so far behind us as we are often apt to suppose. Thrift and patient industry, at least, are qualities which mark the race in no ordinary degree.

Dr. Andrew Wilson's lecture dates for the spring are as follows:—Perth, six "Health Lectures," to be delivered weekly, beginning Tuesday, Feb. 5; Airdrie and Alloa, eight "Combe Lectures" (Wednesdays and Thursdays), beginning Feb. 6 and 7 respectively; Falkirk, six "Health Lectures," on Fridays, beginning Feb. 8; St. Leonards, four afternoon lectures on "Anatomy and Physiology" (as given at Prince's Hall, Piccadilly, London), on four Saturdays, at three o'clock, beginning Saturday, Feb. 16; Plymouth, four lectures (as at St. Leonards) in the Guildhall, on the evenings of April 28, 29, 30, and May 1; Middlesbrough-on-Tees, April 3, on "The Distribution of Animal Life." Other engagements are pending in addition to above-fixed dates. Mr. John Flack, 74, Great Queen-street, London, W.C., acts as Dr. Wilson's agent in connection with London and provincial lecture business.

Pure Water is such a vital necessity that, without it, illness is certain. None are more prone to the ill effects when impure than the young. To ensure a pure supply send a post-card to the London and General Water Purifying Company, Limited, 157, Strand, London, W.C., who will return particulars post free.—[Advt.]

Original Essays

"Life is not to live, but to be well."—*Martial.*

EXAMINATIONS, SCHOOLS, AND HEALTH.

By Geo. G. Chisholm, M.A., B.Sc.

FIRST PAPER.

Nothing can be more notorious than that the examination system is becoming more firmly established and more widely extended among us every day. Yet it is very remarkable that there is no institution against which the outcry is more general on the part of all those concerned in it. The examiners in numberless cases detest and denounce it, and with good reason, for there is hardly any task to which a human being can be condemned more irksome than that of conducting examinations, and reading and valuing examination papers. Parents denounce it because they see the worry and overwork which it often causes their children, and children hate it absolutely.

Why, then, can't we get rid of it? That, however, is a question that might be asked with equal propriety regarding a number of other institutions which nobody likes, but which all have to put up with, even though they may seem to depend for their existence solely on the pleasure of those who maintain them. We may take as an instance that form of head-covering familiarly known as the "stove-pipe." At least three generations of trousered bipeds have inwardly fumed under the infliction; but chafe and fret as we may, we all know that we must submit.

And just so it would appear to be with examinations. Nobody likes them. We might fancy, therefore, that we should easily be able to put an end to them, yet we know that we can't. But there is a reason for everything, and when we begin to inquire into the reasons for the continuance of the examination system, we soon discover that the system exists to satisfy the wants of those concerned in it. In spite of their frequent denunciations, examiners want to examine, for their own prosperity often depends largely on the maintenance of the system. And in spite of their expressed aversion to the practice, parents want to have their children examined, and children themselves when they are old enough to choose a career, or to adopt one chosen for them, are eager enough to pass examinations, while even before that they can very readily be induced to submit to the ordeal by the stimulus of rivalry or love of distinction.

The truth is, that our examination system is a natural consequence of the struggle for existence in which we must all share. The increasing severity of examinations is only a phase of the growing intensity of competition which now characterises every department of industry in the widest sense of that term. The system maintains itself as an essential part of the battle of life which we all have to fight—all with a few exceptions not worth counting.

And after all, examinations are no new thing. In the days of our fathers and grandfathers there were examinations too, even though the institution may seem to be one of quite recent growth. Formerly, as now, the best fitted had to be selected for the different posts in life by some rough method as convenient as could readily be adopted. But in former times the qualifications required were more frequently fulfilled by the mere possession of a good *physique* along with an education of no very special kind. Candidates for appointments could, therefore, be examined as a rule by simple inspection, and the elaborate examining machinery of the present day could be dispensed with.

Nowadays, on the other hand, every department of business has become more complex, has come to depend more on careful organisation and on the intellectual ability of those concerned in its management. What is now sought for is mental capacity, and mental capacity, therefore, has to be tested. Hence our present examination system.

But if such is the case, the question that we must ask with regard to that system is not, Why can't we get rid of it? but, What is the use of protesting against it? It may be an evil, but it is an evil against which it is of no avail to rebel.

And it may readily be granted that examinations are, in some form or other, a necessity, and will never be altogether abolished. But if there are any evils in our present system, it does not follow that they are all equally inevitable. I have said that the present examination system is a natural consequence of the struggle for existence as at present carried on; but I have not said that it is an unavoidable consequence of that struggle. The laws of nature may be counteracted in their operation by the operation of other laws; and in human affairs, when things go wrong, the great hope of improvement lies in this, that human reason may be counted on sooner or later to operate in the direction of putting things right. That reason may so act, what is most needed is a just apprehension of the facts, and it is the function of a periodical like this to aid in diffusing such an apprehension of the facts in all that pertains to the preservation of health.

If, then, our present examination system involves in its working anything injurious to health, it is our business to show how it does so, and how the evils pointed out can be removed, if they can be removed at all. And it may be as well to state at the outset that if any such injurious consequences are involved, the best hope of improvement is to be derived from a perception of the fact that in that case, and in so far, the system fails of its aim.

A system as a whole is to be judged by the idea that governs it rather than by its practical working. Now, the idea at the root of the examination system has two aspects. On the one hand, the system is a means of finding the best men for the highest posts; on the other hand, it is a means of getting the young launched on a career in life through the obtaining of certificates of competence. But, for the highest posts we not only want the best men, but we want these men at their best, and, in so far as the examination system has a tendency to injure the health, it tends to defeat this aim. And, again, with reference to the ultimate aim of the candidates, or those who are responsible for causing children to undergo examinations, it cannot be too emphatically urged in a publication having the aims which it is our duty to keep in view, that no advantage in the battle of life is equal to that of vigorous health, and that consequently no gain to be derived from success in examinations can make up for the loss due to an enfeebled constitution.

But there are many who will stop me by contending that I am too hasty in assuming that the system in question does involve any serious dangers to health. They will say that the ill-health from which children suffer at school is not due to examinations, overwork, or any such cause, but is really due to "overcrowding in towns," to "bad ventilation," to this, that, or the other thing. But why, if we attend to certain causes, should the others be slighted? It may be quite true that all the things referred to do tend to bring about the result complained of, and yet the examination system may rightly bear part of the blame too. Nothing is, indeed, more likely than that various causes are co-operating to bring about the ill-health which we must seek to prevent. No doubt we have various enemies to contend against, and in dealing with them we must follow Napoleon's plan. We must attack them all wherever they are to be found, attack them at once, and attack them, when possible, singly, with all the force that can be brought to bear upon each.

But first of all we must make a *reconnaissance*. We must try to ascertain the exact nature of our enemies and to gauge their strength; and, therefore, I propose next to devote some space to showing that the current ideas regarding examinations and the present working of the system really are among the enemies of health, and in what way they are so. But this task must be reserved for a subsequent paper.

The "Spécialité" Lime Juice, for family daily use throughout the year, has not the usual musty flavour; will not turn mouldy; may be obtained of Chemists and Grocers.—Feltoe & Sons, Albemarle-street, London, W.—[Advt.]

SANITARY GOSSIP.

By Dr. Thomas J. Hutchinson, F.R.G.S.I.

(*Corr. Mem. of Anthropological Society at Florence, &c., &c.*)

"An I prate of things here and there,
'Tis only *Gossip*."

HOUSE VENTILATION.

Unless with that newly-organised nomadic race "the globe trotter," our people in civilised countries pass the largest part of their existence within doors. In the offices, stores, counting houses, workshops, at meal times, and in bed we are inside-dwellers. Therefore, equal in importance, if not surpassing the necessity of fresh air outside, comes that of house-ventilation, by which the free fresh air is admitted, and should be constantly kept up in our dwellings.

The indispensable necessity for fresh air during our sleeping hours has been demonstrated by Miss Florence Nightingale during her Crimean experiences and is set forth in her "Notes on Nursing." It may be further verified by a few facts. If two persons are to share the same bed-room during a night let them step upon weighing scales as they are about to retire, and then again do the same thing in the morning. They will find their actual weight to be at least a pound less at the latter period. Frequently these will be a loss of two or more pounds, and the average loss throughout the year will be more than one pound per night. That is to say, during the night there is an exit of about one pound of matter which has gone off from the body, partly from the lungs and partly from the skin. The escaped article is carbonic acid gas, along with decayed, or rather waste, animal matter, or poisonous exhalation.

Now, if a single ounce of cotton be burned in a room, it will so completely saturate the chamber with smoke that one can hardly breathe, although there is only a single ounce of foreign matter in the air. Should an ounce of cotton be burned every half-hour during the night, the air

Sanitary Inspections.—Fee for Survey and Report, in London, 2 Guineas. Estimate given and Improvement Works carried out when required.—The Sanitary Engineering Co., 115, Victoria-street, Westminster, S.W.—[Advt.]

More about Kola Nut.—Messrs. Heyman & Phillips, of 15, Clifford-street, Bond-street, W., are grateful to the Editor of Health for his interesting article in the issue of January 11th. The Kola Nut on sale, 2s. 9d. a box, from them or from all chemists. —[Advt.]

would be kept continually saturated with smoke, unless there can be an open door or window for it to escape. But the sixteen ounces of smoke thus formed by the cotton burning are far less poisonous than the sixteen ounces of exhalations from the lungs and bodies of two persons who have each lost a pound in weight during the eight hours of sleeping. For while the dry smoke is mainly taken into the lungs, the damp odours from the body are again absorbed into the lungs as well as into the pores of the skin.

Two other very important items of the healthy condition of our sleeping rooms (besides the admission of air) consist in the facts that in the morning, after leaving the couch, all the bed clothes should be aired for a few hours before being made up again, and that chimneys should never be stopped up with shavings, or with a wooden board, as is often done in the summer time. To air sheets, blankets, and other coverings, even in the bed-room, before re-arrangement, and to do this for as long a time as can be done, conduces wonderfully to the freshness and enjoyment of the bed at night—as well as to the healthy rest which is certain to ensue. These may seem trifles, but it is no harm to remember that trifles make up the sum of our comforts and existence.

It is difficult to secure a constant supply of fresh air in large towns, unless these cities are arranged and kept by the governing authorities under a proper sanitary *régime*. In London, for instance, what can be more distressing than the consciousness that at every breath you draw into your lungs you are inhaling part of the carbonic acid, waste matters, and defiled atmosphere that has served the same purpose for four millions of human beings—your fellow citizens. These elements that I have mentioned may have made a circuitous aerial gyration from Mayfair to St. Giles's—from thence to Tyburnia and Buckingham Palace. Perhaps they meandered to Ratcliffe Highway, where they have served the inhabitants as they are now serving you (though with an infinitesimal addition of oxygen) up at Kensington or Maida Hill. But this state of atmosphere would be much changed for the better if trees and shrubs were more generally planted than they are now in many parts of London, more particularly in the neighbourhoods of the model lodging-houses. We could not, of course, expect much from this in a short time, but the advantages of the plan may be predicted from what is known about the action of bad air on plants and trees, and the reciprocal good resulting from the manufacture of oxygen.

Ventilation of houses, when first attempted, was carried on through Great Britain and the continent of Europe with very erroneous ideas of the faculties possessed by the atmosphere or of the laws that govern it. Architects were for some time only floundering about in the great ocean of air that surrounds us. Square holes, covered with iron grids to moderate the current of wind, were put into the tops of some room walls, and openings of the like style were placed at the bottoms of other walls in different rooms or passages, so that one often felt as if in a wind-mill. It was supposed the foul air would go out at the top, and the pure air come in at the bottom openings. Whereas the fact soon became proved that the vitiated atmosphere, being the lighter, and trying to go out above, was met by the heavier cold air which thrust it back. This cold air being then "master of the situation," came on into the room "in a stream like water poured out of a jug upon the heads of any unfortunates beneath." At the same time, through the square opening at the bottom, whenever there was a breeze abroad, it entered with a rush, that made one feel as comfortless as if he were pottering amongst the bergs on "Greenland's icy mountains."

The plan of ventilation proposed by Drs. Drysdale and Hayworth in their work on "Health and Comforts in House Building" may do very well for those who can afford to erect palaces, or for those who need to keep themselves "covered with shawls," and to be "protected with screens." But the doctors' mode is not one that can be turned to account by such as need it most—namely, the working men whose cause was advocated at the recent Sanitary Congress in Glasgow by Dr. Carpenter. "The working man," said the latter, "must stay *near to his work*, whilst the shopkeeper and the professional man could, and did, send his family away from the smoke and foul air of the City." "Perfect ventilation," Dr. Hayworth tells us, "is not merely the infusion of fresh air into a room" (including, of course, the room in which the working man toils all day) to mix with that which is already there; it involves the removal of the already existing air and the replacement by fresh air." The laws of the generation and motion of air prove that an abundance of fresh air will destroy the foul air, and take its place—so that there is no occasion for *removals*—if the fresh air be let in freely, and its circulation be not restricted. Moreover, in the rooms devoted to artisans' labour, it is rarely that the temperature could be kept up to 60° in winter time.

The best plans of ventilation, unless for nurseries and sick rooms, are Tobin's tubes and Dr. Hincks Bird's costless window ventilation. For churches, workshops, goods stores, banking offices, printing establishments, lecture rooms, or wherever people have to assemble in crowds, nothing is better than that the windows should be on Dr. Bird's plan. This, as well as Tobin's tube, permits the air *to enter the room in a vertical column*, and thus all draught from above or below is avoided. In Health (p. 1 of the second volume) the efficiency of this system is mentioned, and the following directions given for its application:—"Raise the lower sash of the window about three or four inches; fill up the open space by a block of wood, so that the lower sash will rest thereon. This being done, it follows that the top of the lower sash rises above the bottom of the upper sash, and a current of air thus flows in between the two sashes, without draught or annoyance." I have copied out this to add that the *lower sash* must always be the *inner*

Medical and Sanitary Exhibition, 1881.—Award of Merit.—Diabetes. Van Abbott's Gluten Bread, and all other suitable Foods for Diabetic Patients. Dietary Tables and Price Lists post-free on application. Van Abbott, 5, Princes-street, Cavendish-square, W.—Delicate Children and Adults Suffering from Nervous Depression. Van Abbott's Hypophosphite of Lime Biscuits, for Delicate Children, especially those suffering from Deficiency of Bone, Weak Joints, or Debility, and Adults suffering from Nervous Depression. Each Biscuit contains five grains of the Hypophosphite of Lime. "Quite free from disagreeable taste, and taken willingly by Children, and certainly provide an excellent means of administering this valuable compound. Our analysis proves the accuracy of the printed descriptions on the labels of the boxes. The Biscuits were suggested by Mr. W. Adams, of the Orthopædic and Great Northern Hospitals." — *Lancet*, Nov. 4, 1876.—Van Abbott, 5, Princes-street, Cavendish-square.—[Advt.]

Snelgrove's Governor Gas Burners.—Save quarter to half the gas bill. 15s. per dozen. Samples 18 stamps. Lists free.—60, Queen Victoria-street, E.C.; and of all Ironmongers.—[Advt.]

Dr. Nichols' Penny Vegetarian Cookery-Book.—Every household should possess this marvel of cheapness. Free for 1½d.—Nichols & Co., 23, Oxford-street, London, W.—[Advt.]

The "Boncontour" Stay-Belt and other Orthopædic Apparatus, made by K. R. Schramm, Orthopædic Mechanician, 64, Belmont-street, Chalk Farm-road, London, W.—[Advt.]

*sash ;** for if the *lower* happened to be the *outer* one the air should come down, not upwards. I know personally of its value, for I had all the windows of my house fitted with it during a three years' residence in Ireland. Even through the winter time, with a good fire in the room, it was rarely too cold ; and the block of wood at the bottom of the sash, being movable, could be taken out in case of a storm. On the continent, especially in France, Spain, and Italy, there must be a difficulty for some time even in trying the system, as the windows in these countries open on hinges, like double doors ; and house ventilation is not yet considered a matter of such importance as it ought to be all over the world.

The following is recommended as a cure for toothache resulting from hollow teeth. Into two parts of melted white wax or spermaceti, one part of carbolic acid crystals and two parts of chloral hydrate crystals are introduced, and the whole well stirred. Into this liquid thin layers of carbolised cotton wool are introduced and allowed to dry. A plug of this, slightly warmed, inserted into a hollow tooth is said to give immediate relief.

International Health Exhibition, London, 1884.—The Sub-Committee on Dress have prepared a Memorandum showing the class of exhibits which is desired for that Group. The classification includes collections illustrative of the history of dress, national costume, &c. ; waterproof clothing, indiarubber, gutta-percha, &c. ; dresses for extreme climates, &c. ; dress for sport, hunting suits, &c. ; life-saving dress, divers' dress, fireproof dress, &c. There is also a special class devoted to the comparative value of different dress materials for articles of clothing. Under it should be displayed a number of illustrative specimens to show the comparative value of different dress fabrics with reference to their warmth, their hygroscopic properties, the influence of the colour of materials in modifying the effects of sun-heat, and the like. It would be well to show under this class models and drawings illustrative of the effects of poisonous dyes (in clothing) upon the skin. Materials dyed with poisonous and non-poisonous dyes could be placed together for purposes of comparison. The Sub-Committee are prepared to arrange for a special display of materials and garments, &c., worn next to the skin. Some of these will be shown in a special annexe, to which females alone will have access, or which will, at least, not be open to both sexes at one time. As one special feature in such an Exhibition, the Sub-Committee would suggest a series of models displaying the first clothing of infants as adopted in the various countries of the world—as far as such examples could be obtained. Special attention will be given to dresses suitable for women engaging in exercise, such as dresses for mountaineering, for the moors, for swimming, for horse exercise, for gymnastics, and the like. Under the class devoted to life-saving dress, &c., should be actually demonstrated the value of certain substances used for making muslin and like fabrics non-inflammable. The various artificial starches made for this purpose should be displayed, and their use and effect demonstrated. The dress of female operatives engaged among machinery may be dealt with in this class ; also special dresses recommended or in use in factories and occupations of special character, *e.g.* : dresses for lead and other factories ; dresses of nurses and sick attendants ; of soldiers and sailors ; life-saving dresses ; firemen's dresses.

* In all ordinary windows the lower sash is always the inner one. —[Ed. "H."]

Personal Health

"Be timely wise ;
With health all taste of pleasure flies."—*Gay.*

BEAUTY-CULTURE.

By Philip Foster, M.D.

SECOND PART.

"Beauty itself doth of itself persuade
The eyes of men without an orator."—*Shakespere.*

The body should be washed with hot water and plenty of soap at least once a week, and sponged with cold water and rubbed briskly with a rough towel until quite dry and warm every morning. Let it be distinctly understood that cold water is not necessarily water of the same temperature as the atmosphere. Water is really cold—that is, cold in comparison with the body—when it is of a lower temperature than the body. It should have a stimulating, not a depressing effect ; we should feel warmer, fresher, and better after it, and if we do not, it is a sign that the water, whatever its temperature may be, is too cold for us, and the effect will be injurious, instead of beneficial. About 60° F., the usual temperature of water in summer, will suit most persons, but our feelings will be our best guide. In winter, then, and in summer, too, when the water in our bath is of too low a temperature to be agreeable, sufficient hot should be added to raise it to the desired point. This cold sponging is so excellent a tonic, bracer of the nerves, and invigorator of the whole system, that it is very desirable that it should not be discontinued in winter, but used regularly all the year round ; and it may be, even by the most delicate, if they will but act upon this advice. Common, brilliantly coloured, and excessively alkaline soaps should be avoided.

The teeth, the preservation of which is, I need hardly say, an important element in the preservation of health, should be cleaned by brushing every part of them at least once a day—morning and night, if possible, with camphorated chalk, as a cheap and excellent dentifrice. Just as much clothing ought to be worn as comfort requires. If we have too much on, the body is weakened and rendered more susceptible to cold ; if too little, the surface is chilled, and the vital processes retarded. Clothes do not give heat to the body, but keep us warm by preventing that generated within the body leaving it. Wool, being the best non-conductor, is the best material to wear next the skin. The whole of the body should be covered—lightly in summer and more heavily in winter, but always covered ; and on this ground I maintain that our mode of dressing children is radically wrong. How ridiculous, too, it is of ladies, after being all day in warm rooms with the chest and shoulders closely wrapped, to go in the evening to draughty ball-rooms and theatres with these parts uncovered, and this, too, at the most inclement season of the year. Many a bright young life has been cut short—many a happy home darkened by this insane fashion.

Clothes should be easy. Tight-lacing presses upon and interferes with the free action of the lungs, heart, stomach, liver, and intestines — organs the free and perfect performance of whose functions is absolutely essential to health. It is also a frequent cause of spinal complaints, and is incompatible with an easy and graceful carriage.

If the chemise be changed at bedtime—which I do not approve of, except in very hot weather—the one put on should be of the same material and thickness as that taken off.

The "divided skirt," an attempt to provide each leg with another distinct and separate covering, is a step in the right direction. By the adoption of some device of this kind, and the substitution of woollen for cotton undergarments, women might be much more effectually, comfortably, and lightly clad than they are at present. Wet clothes should be changed on the first opportunity; and, until this can be done, we should keep moving about, as it is sitting still in them that gives cold.

To keep the feet dry and warm is a matter of the utmost importance. In rough weather, a good double-soled boot should be worn. The warmth of any part of the body depends upon the vigour of the circulation in it, and if our feet are cold, in spite of being well shod, our remedy lies in increasing the circulation. This may be done by washing them every morning in cold water — if cold occasion any feeling of numbness or discomfort, tepid should be used—and rubbing briskly with a rough towel until quite warm; taking plenty of walking exercise; and not allowing them to be compressed. This last condition is an essential one, for how can the circulation be free and vigorous in tight boots?

Expression, without which the most perfectly-moulded features soon cease to interest and attract, is the creation of intelligence, and consequently may be greatly increased by cultivation. The study of languages, although highly desirable, and in many cases absolutely necessary, is, rightly viewed, simply the means to an end, not the end itself; for it is by the acquisition of ideas, not words, that the mind is expanded and enlarged. The natural sciences must be looked to for this. However attractive a particular branch of science may prove, it should not be exclusively studied, for every lady ought to know something about the earth upon which she is placed and the natural objects by which she is surrounded. Don't be afraid of being too learned. Knowledge itself will never cause you to be disliked, although the unseasonable display of it may. Not only have ideas to be acquired, but the reasoning power must be cultivated by studying the great masters of logic—Locke, Paley, Bacon, Newton, and Johnson, and the poetic faculty judiciously ministered to.

Well-informed associates are agents in education the value of which cannot be over-estimated; and if we would add to intellectuality refinement, which gives so great and rare a charm to the face, we must be careful about the thoughts we indulge as well as the company we keep. Amiability, contentment, and cheerfulness, the controlling elements in expression, are the result of mental regulation. Consideration of the cares, troubles, and sorrows of others will assuredly take us out of ourselves, and make us sympathetic and amiable; while allowing the mind to dwell upon what we have rather than upon what we have not, and duties conscientiously discharged, will conduce to contentment and cheerfulness.

(*To be concluded.*)

Powngeby's Pure Wines and Brandies, as analysed, and especially selected to suit medicinal purposes, may be obtained in small quantities at wholesale prices. Free delivery within fifty miles. Circular and price current by post from Powngeby & Co., Wine and Brandy Importers, 183, Oxford-street London, W.—[Advt.]

Barnes's Impermeable Opium Poultice, an effective and perfectly safe application for relief in neuralgia, gout, rheumatism, painful swellings, and lumbago. Prices by post 1s. 3d. and 2s. 5d. 1 and 2, Trevor-terrace, Knightsbridge, S.W.—[Advt.]

The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

THE TREATMENT OF DIARRHŒA AND RHEUMATISM.

We take the following valuable information from the interesting "Lectures on Medical Nursing" (lately reviewed in our columns), by Dr. Wallace Anderson, of Glasgow. The volume, which teems with important advice, is published by Messrs. Maclehose, of Glasgow:—

Diarrhœa is a disorder affecting the intestinal canal itself; the very part of the body whose office it is to introduce the food to the system generally. Improper food, or an improper amount of food, is a common cause; but sudden chills, warm weather, and disorders of other parts of the body are examples of what also may occasion it. In this affection the lining membrane of the bowel is inflamed and irritable, or relaxed; such a condition requires a diet that will be bland and astringent. Milk, especially boiled milk, has to some degree these qualities naturally, and it is usually the basis of whatever diet is prescribed. The addition of equal parts, or perhaps a third, of lime water makes it more astringent. A little isinglass, dissolved first in water, and then added to the milk, becomes somewhat of a protective to the irritable bowel. A similar and very good preparation is one quart of milk mixed with the whites of three or four eggs beaten to a froth. Sometimes the milk will not agree, and it will be necessary to substitute simply the same quantity of water sweetened with a little fruit syrup of some kind.

A less common, but often most valuable kind of diet, particularly in the diarrhœa of children, is that of raw meat, a method of treatment that comes to us originally from Russia. Its preparation will, of course, devolve upon you; it is quite a simple matter. What you want is to leave all the shreddy fibrous tissue, and get only the soft pulp of the meat. This is done by taking a small piece of lean, juicy meat, and scraping it with a knife in one direction. Each stroke of the knife will bring away on its edge some of the soft pulp, and this can be continued till nothing but shreddy indigestible fibre is left. A little salt may be added to the soft meat, which can then be spread on thin toast or biscuit. For a child of one year old it is usual to begin with 1 oz. in the day divided into three parts. If it is necessary to disguise it in some way a little jelly may be added.

I conclude the consideration of this disease with an important caution. Remember that in cases of diarrhœa you are not to give on your own responsibility that never-failing meal for invalids—a basin of beef-tea. In any such condition of the intestinal canal beef-tea is decidedly laxative. It is sometimes so in healthy children of one or two years of age.

Rheumatism.—There is little to be said about diet in this affection, and it is more as a connecting link than from any special importance attaching to it, that I make the remark that we usually avoid giving animal food in this disease. The great point in the care of rheumatism, I mean particularly acute rheumatism (in which besides the pain there is high fever), is the avoidance of anything that will chill the patient. To emphasise this, one is almost justified in saying that here *warm* air is more important than fresh air. The least exposure to cold may greatly

Health, comfort, and economy promoted by Chappuis' Reflectors, 69, Fleet-street.—[Advt.]

aggravate the disease. If details are left to you and the case is at all severe, you should see that the patient lies between blankets, and that he wears a flannel night-dress. One, or more likely several, of his joints will be swollen and painful, and for that you may be ordered to apply fomentations to the inflamed parts, or perhaps a blister. The method of applying these and other external remedies will be considered later.

Further, you must remember that the disorder is one of the whole system, and therefore the local joint affection passes readily from one to another—for example, from the knee to the wrist, from the elbow to the ankle. And so it will be your duty to see that no arm or even hand becomes exposed (as might readily be done in order to read a newspaper or book) till the physician's permission is obtained. A sour smelling, profuse perspiration is a characteristic symptom of the disease which often causes considerable discomfort. Should this be the case you may dry the skin with a warmed towel, but it must be done quickly, and with as little exposure as possible.

It is right that you should know also that the great complication of acute rheumatism is heart disease. You must at once, then, report any sudden rise in temperature, complaint of oppression over the heart, palpitation, or similar symptom, which often indicates the beginning of cardiac mischief.

There is one point connected with a special treatment that you should know. A recent and much-approved remedy in rheumatism is salicylic acid or salicylate of soda, and it is often given until its effects on the system, apart from its influence on the disease, are observed. These are sickness, deafness or ringing in the ears, giddiness on sitting up in bed, and such like. In some cases it may be left to you to continue giving the medicine till one or other of these effects is noticed.

Lastly, you must always remember the great liability the disease has to relapse or to return. You will be careful, therefore, to carry out to the letter all directions as to the avoidance of draughts, exposure to cold, &c., even when the patient appears to have quite recovered.

Water and Disease.—Ague, commonly known as fever and ague, is a disease that appears to be most frequently transmitted through the air, but we have evidence that water is capable of conveying it also. This has from very early ages been believed, for we find it mentioned by Hippocrates that drinking marsh-water produced spleen-disease, which is always associated with ague. In India a similar belief has always existed among the natives; even the drinking of river-water containing vegetable matter from marshy districts has appeared to produce ague in places which were otherwise free from any suspicion of marsh-poison. Dr. Smart has pointed out the same thing in the mountainous regions of North America. A very interesting case occurred a few years ago at Tilbury Fort, when the artillery quartered there were supplied with so-called rain-water, collected in underground tanks dug in the marsh. The men suffered severely from ague so long as they used the water, but the disease disappeared on other water being taken into use during the repair of the tanks. When the troops returned to the use of the tank-water, the disease broke out again. The water was analysed, and found to be very impure; in fact, the water from the marsh had soaked in in large quantities, and been drunk by the men under the belief that they were being supplied with rain-water. Although this is an occurrence not likely to be common in this country, it is importing as indicating possible dangers to be guarded against.

Healthy Houses

"A happy home must be a healthy home."—*Anon.*

THE CARBONIC ACID OF THE ATMOSPHERE.

An important paper on this subject, written by E. H. Cook, —dealing with the gas which, as everyone knows, is breathed out from our lungs—has recently appeared in the *Philosophical Magazine*. Taking the polar diameter of the earth as 7,899 miles, the equatorial diameter as 7,925·5 miles, and the height of the ordinary atmosphere as 26,214 feet—nearly five miles—the cubical contents of the atmosphere is found to be 591,647,337 cubic miles, or in round numbers, 592,000,000 cubic miles. If the average amount of carbonic acid in the atmosphere (*i.e.*, ordinarily pure air) be taken as 4 vols. in 10,000, the total amount of carbonic acid is 236,800 cubic miles, and the total weight 4,287 billions of pounds, or 1,913,685,908,480,000 kilogrammes. These numbers differ considerably from those given by Dumas and Baussingault, and from that given in Roscoe and Schorlemmer's "Chemistry." The first of these is nearly forty per cent., and the second about thirty-three per cent. too high.

Recent investigations, however, show that the proportion of carbonic acid in the atmosphere is not so high as 4 vols. in 10,000. Fithbogen and Hasselbarth found 3·4 vols. in 10,000; Farsky, 3·4 vols.; and Reiset, 2·942 vols.; and if the mean of these be taken, the total weight of the carbonic acid in the atmosphere is nearly 1,545 billions of kilogrammes. The average amount of coal raised annually in the world during the last three years is about 280,000,000 tons. Assuming that this contains seventy-five per cent. of carbon, ten per cent. of which is thrown away with the ash, 182,000,000 tons of carbon are annually converted into carbonic acid, which gives a daily production of 1,800,000 tons, or nearly 1,800,000,000 kilos. Assuming that one-third more is produced by the combustion of wood, peat, oil, &c., the total daily production by combustion is 2,400,000,000 kilos. The present population of the world is about 1,500,000,000, and each individual produces on an average a kilogramme (a kilogramme is 2 204 lb. avoirdupois) of carbonic acid in twenty-four hours. Assuming that twice as much carbonic acid is produced by the respiration of the lower animals as by man, the total amount produced by respiration is 1,500,000,000 kilos. per day. The amount produced by the decay of animal and vegetable matter may be taken as equal to that produced by the respiration of man, and the amount sent into the air from subterranean sources may be fairly assumed to be five times as great as the total amount derived from all the other sources together. This gives about 40,000,000,000 kilos. per day. Adding all these quantities together, it is found that the total amount of carbonic acid daily added to the atmosphere is at least 50,000,000,000 kilos., from which it follows that if no compensating influences were at work, the proportion of carbonic acid would be doubled in about one hundred years.

The causes which remove carbonic acid from the air are the absorption of this gas of carbon by green plants by day, and absorption of the acid by inorganic chemical action. In the first case alone is oxygen returned to the atmosphere; in the other case the carbonic acid is absorbed as a whole. The total area of the land surface of the globe is, according to Saunders, 57,600,000 square miles. Of this, 8,200,000 square miles are in arctic and antarctic regions, thus leaving 49,400,000 square miles on

which vegetation might flourish. A considerable portion of this area is, however, occupied by barren mountains, cities, and rivers. Estimating the total area of leaf surface at 50 per cent. of the area of plant-bearing land, it follows that 24,700,000 square miles, or 63,973,000,000,000 square mètres (a square mètre is 10·76 square feet) of leaf surface are engaged in the work of removing carbonic acid. Since each square mètre of leaf-surface decomposes about 1 litre of carbonic acid per hour, it follows that 63,973,000,000,000 litres (a litre is 61·027 cubic inches) of the gas are decomposed every hour. Taking into account the fact that sunlight, on the average, lasts only ten hours per day, and allowing 25 per cent. for diminution of the action during winter, the average amount of carbonic acid decomposed per day is 479,000,000,000 kilolitres (a kilolitre is 220·09 gallons), or more than 900,000,000,000 kilos. A considerable portion of the carbon thus removed is, however, returned to the air when the leaves decompose in the autumn; and allowance must also be made for the fact that some plants give off carbonic acid in the dark. On this point, however, there are no data on which to base any calculation, and the evolution of carbonic acid by the nocturnal respiration of plants may be much greater than is usually supposed. From the numbers given it would appear that the vegetable life of the globe is of itself sufficient to maintain the purity of the atmosphere.

The removal of carbonic acid form sea-water by low forms of animal life takes place on a gigantic scale, but the carbonic acid thus removed exists in the sea and not in the atmosphere, and a very large proportion of it must be derived from submarine volcanic eruptions. In all probability the influence of this action is felt only after many years, and so far as the atmosphere is concerned, it cannot be compared to plant life in point of activity.

These calculations seem to show that the causes which remove carbonic acid from air are more powerful than those which add the gas to the air. Its proportion must, therefore, be gradually decreasing, but there are no trustworthy data on which to base any calculations of this point. As to the source of the enormous quantities of carbonic acid already fixed in the form of limestone, we have no knowledge. Either at one time the atmosphere surrounding the earth must have been much richer in carbonic acid than it is at present, or, as Sterry Hunt supposes, there must be a universal atmosphere similar to our own, from which the carbonic acid now fixed in the earth's crust has been derived.

Treatment of Warts.—It has been stated that MM. Champonière and Foussagrenes, two French doctors, have cured warts by the internal administration of 12-grain doses of calcined magnesia, but the *modus operandi* of the medicine they could not explain.

Fruit-eating must obtain more largely than it does, not as a luxury, but as a hygienic measure. Our lives are becoming impaired, and meat-eating is a luxury which is incompatible with many generations without deterioration of the viscera; and consequently our dietaries must be modified accordingly.

As regards the interior of houses, plaster, whether on brick or lath, is exceedingly porous, and permits of a ready diffusion of gases; and a wall merely whitewashed or coloured with distemper is better in a sanitary point of view than one that is covered with oil paint, which becomes by this process practically impervious to the passage of gases. Wall-papers are probably not so bad in this respect as oil paint, but are certainly inferior to distemper or whitewash.

Recreation and Health

"Health is the vital principle of bliss,
And Exercise of health."—*Thomson.*

CALISTHENICS, OR LESSONS IN PHYSICAL EDUCATION.

By H. C. Standage.

(FIRST PAPER).

"What a magnificent bust that girl has!"

"Do you think so, Charles? Her waist is too large."

"Not at all, Anne, for her fine pair of shoulders."

"Do you admire broad shoulders in a woman?"

"Not if they have a masculine appearance, but that young lady has not broad shoulders, she has a lovely figure, well-proportioned."

"Oh, I see, Charles, you like tall, stout figures."

"I am not partial to any particular size, if the figure is well-proportioned throughout. I always look upon a slim, flat-chested figure as a defect in natural growth, and a pinched-in waist, a crime."

"Why, I always thought your sex liked small waists."

"We do if they are naturally so, but to see nature tortured is painful to our feelings. It was only the other day, when walking down the Cromwell-road, I found myself behind two ladies going in the same direction. To one Nature had given full development. But her walk—how horrible! A full bust and fine pair of shoulders, and a pinched-in waist! Natural beauty was destroyed when fashion stepped in, for with each step she rocked from side to side, giving the appearance to her bust (which she kept perfectly erect from the waist upwards) as if poised on a swinging pendulum. Imagine to yourself an hour-glass, one half erect and steady, and the lower half rocking to and fro, and you have the appearance of her gait. What pain she must have suffered! I momentarily expected to see her part in two at the waist. The torture she must have endured was too painful to my feelings. I had to step out and walk before them. If she had not had that unnaturally pinched-in waist, her movements would have been entirely graceful, and her figure would have won my admiration."

"You do not believe in corsets, then, I suppose Charles?"

"Where they form a material support to the body, as in the case of a mother, I think they are useful—if they are not turned into an instrument for the self-infliction of physical discomfort—but for young girls, I think the natural form of the figure is most charming."

"Oh! How horrid! Why you would have us as broad at our waist as at our shoulders—like some awkward, overgrown school-girl of fourteen."

"That rests with themselves. If they do not choose to assist nature they have but their own indolence and prejudices to thank for such stunted development—such as you see nine out of every ten girls you meet exhibit in their figure."

"What would you have us do, then? You would not like to see us run races, jump ditches, fly hurdles, or exhibit an agility like some acrobat on the trapeze?"

"I would have all girls go through some form of physical exercise while they are growing. Certainly I do not want to see them coming into the field to compete against professional athletics nor gymnasts. But for their own perfect development and health, and health of the future generation, it is necessary they should physically

train their bodies so as to possess full power over every limb and movement."

"Why, Charles, I verily believe you would have girls to be an army of amazons."

"Oh, dear no, not at all. There is no necessity to carry such exercises to extremes, nor to develop muscles and sinew in the limbs 'hard as iron bands.' For there are many calisthenic exercises of a gentle character which would, when practised, increase the lung power, lithesomeness, and gracefulness of the body."

"I wish you would not use such long words, Charles. What is the meaning of calisthenics?"

"It is a term applied to exercises for strengthening the body, and giving ease and elegance to the movements of the limbs, and is usually, though not necessarily so, confined to the exercises performed by girls, in a similar manner that of gymnastics is to boy's exercises, although the latter term, gymnastics, is really the name of the system by which disease is treated, and health maintained, through the regular practice of active exercises."

"Thank you for your pedantic explanation. I knew I should get a rebuff for my ignorance, but I think you are wrong about increased 'lung-power.' A woman does not want to have a stentorian voice, and be able to shout like boys just let loose from school. A woman's voice should be soft, low, and gentle."

"Pardon me, Anne; let me explain. The other day you were wishing you had such full command over your voice as Miss Johnson has. You have always bewailed your inability to sing in a powerful, rich voice, and it is within your power to possess such a voice."

"How?"

"By allowing free movement to your shoulders and the muscles of your chest."

"You forget, Charles, when I sing much I have a sharp pain in my side, and feel very exhausted."

"No wonder, with that wasp-waist. Cease to lace in, and take exercise for the chest, and you will no longer suffer such inconveniences."

"Now, you are cruel. I won't listen to you."

"Self-willed, as you always are. Cruel or not, it is the truth; but I forgot that truth is never very palatable."

"Perhaps, Mr. Cynical, you will give Ethel some of your wonderful advice, and tell her how to cure her awkwardness and become graceful in her movements. To do so, I suppose you would put her through a course on the parallel bars or exercises on the trapeze. I've often heard you praise Miss Cameron as the acme of gracefulness; yet she never had a single lesson in what you call physical exercise."

"Perhaps not. Some persons are naturally graceful in all their movements."

"And some naturally awkward, I suppose you would say?"

"Certainly; but such natural awkwardness can be easily overcome by artificial means that are within every girl's power."

"Look, Charles! There is one of your 'fully developed women.' Perhaps she has had a physical education. But look how she walks!"

"No wonder, with her toes cramped together and her boot-heels halfway under the bend of her foot."

"Sarcastic again. Yet she has a 'magnificent bust and a fine pair of shoulders.'"

"Disfigured by an unnatural hump dangling behind!"

"There, the lady now passing has no cramped toes nor high heels. Yet she is not walking gracefully!"

"I seldom do see a woman walk gracefully, flat heels or high heels."

"Why?"

"Because they have never learnt how to balance the body on the stationary limb, when walking; and they have never practised the 'goose step.' If they walk fast, it is at a half-trot, head and shoulders jumping up and down, and limbs thrown out in a jerky manner; and if they walk at all gracefully, it is at a snail's pace that is more harmful than healthy."

"What is the 'goose step,' Charles?"

"A term applied to the exercise of balancing the body on either of the lower limbs alternately, as the opposite foot is raised from the ground."

"Perhaps that gentleman across the road walks to perfection. I am sure he has had a physical training?"

"Who?—that 'masher!' He drags each leg after him as if it were loth to leave the pavement. There is no grace in a movement that looks as if the person were too ill to walk."

"Now, Charles, don't be rude again. I was about to ask you how I can obtain command over my voice."

"By going through a few simple exercises that will strengthen your breathing apparatus and movements."

"That seems a learned declaration!"

"Well, I know you detest long scientific terms. If I spoke to you of thorax, larynx, intercostal muscles, &c., they would be but words to you."

"But where am I to learn such exercises? There are no public gymnasia for young women that I know of?

"Oh, yes, there are a few; but I could teach you such exercises as you require."

"You?"

"Yes."

"Oh, that would be nice! Will you? Suppose we set up a calisthenic class. I'll ask Ethel, and Maud, and Jenny, to form one. What do you say?"

"I am most willing, but there is one thing I must ask you, to give implicit obedience to my instructions."

"But don't we want a special dress, with belts and jerseys?"

"Well, not for the first few exercises. Such a dress as that exhibited by Dr. Holms, at the Rational Dress Exhibition, will suit; but I have another costume which I will give you the pattern of to get made up to meet the requirements of the later exercises."

"When shall we begin?"

"This afternoon if you like."

"You are a good brother, Charlie, to devote so much time to your sisters. I'm sure Maud and the rest will welcome the idea; for we want a novelty, we're tired of doing nothing."

"Now, Anne, I don't want you to look on it as a mere novelty, to be given up when tired of it and the novelty is worn off. You must be in earnest."

"I think I can guarantee that we shall attend faithfully to all your rules."

"Very well—till the afternoon, adieu!"

Disinfectant Blue.—A laundry blue with disinfectant qualities is made by mixing together sixteen parts of Prussian blue, two parts of carbolic acid, one part of borax, and one part of gum arabic into a stiff dough. This is divided into balls of small size, each ball being dipped into gelatine or gum to retain the carbolic acid.

Glycerine in Fevers.—Dr. Semnola speaks highly of the following mixture in the denutrition of fever patients: Pure glycerine, 30 grammes; citric acid, 2 grammes; distilled water, 500 grammes. One or two tablespoonfuls every hour. Glycerine he considers an economising agent (*agent d'épargne*), and a course of cod-liver oil, and may prove valuable in the treatment of fevers of prolonged duration, such as typhoid, in allaying the heat-wasting.

Our Bookshelf

"Reading maketh a full man."—*Bacon.*

The Field of Disease. A Book of Preventive Medicine. By Benjamin Ward Richardson, M.D., F.R.S. (London: Macmillan & Co.) 1883.

Few men have lived a more industrious life, and still fewer have spent so many hours and days in health-work of a public kind, undertaken in a solely philanthropic spirit, than Dr. Richardson. He is a many-sided man in the matter of health-work, and is equally at home when discussing such an abstract topic as the "Causes of Felicity," or when devoting practical attention to some concrete branch of the healing art. The large experience acquired in the course of many years of health-work eminently fits Dr. Richardson for the task of exponent of the popular side of preventive medicines. There is a wide difference, not always recognised by the public, between the powers which fit a man for writing a technical manual, and those on which the successful production of a popular treatise depends. The popular writer of the highest class is a man who, in addition to a full and ripe knowledge of his subject, possesses the art of placing information in a readily understood fashion before his readers. He must be at once plain and correct. He must, above all things else, take care that he does not sacrifice correctness of scientific detail to the popularisation of his ideas, and he must likewise write so that he may attract those foreign to the topic towards a perusal of his pages.

Now, Dr. Richardson appears to us to exhibit in typical fashion those characteristics in which the features of scientific knowledge and the art of popularising science are combined. His present book—a bulky, clearly-printed volume—testifies to his success in making a technical topic understood by the people. He writes for the "intelligent reading public, who, without desiring to trench on the province of the physician and surgeon, or to dabble in the science and art of medical treatment of disease, wish to know the leading facts about the diseases of the human family, their causes and prevention." Such are Dr. Richardson's prefatory words. They express the gist of his work and labours, and show us the aims of the volume he has produced. We may, however, dispute the advisability of his stopping short at the "causes" and "prevention" of diseases. It is impossible in the case of the intelligent public who read Dr. Richardson's book not to concern themselves in some measure with the question of disease-treatment. Even the discussion of "prevention" is infringing upon what Dr. Richardson might reasonably regard as a purely medical province. We are no believers in the idea that an intelligent man or woman is any the worse for knowing certain plain, broad, and general details respecting the treatment of disease. To argue otherwise is a piece of professional special pleading which undervalues and underestimates the intelligence it would rely on, as interesting itself in the causes of disease. We regard it as a perfectly possible thing that educated men and women may acquire the broad elements of medicine and surgery, and of the principles on which diseases are treated, as part of their education. To-day, ambulance lectures teach the public how to treat wounds, to bind up fractures, and to administer remedies in cases of poisoning. There is no more cogent reason why the public should not know the general principles of disease-treatment, than for their remaining ignorant of ambulance details; and, so far from usurping in any sense the work or functions of physician or surgeon, we are convinced that the spread of such information would tend to make the public at large sympathise more deeply, and assist more readily, the humane labours of the medical profession.

Dr. Richardson's work will prove both interesting and instructive to the general reader. He will be led by the author's descriptions into the great "field of disease," occupied by its hundreds of varied ailments, each affecting the body in its own special fashion, and each presenting the physician with its own phases for study. Throughout the work, the dominant tone, so to speak, is "prevention." Dr. Richardson is never weary of enforcing the truth of the saying that "prevention is better than cure." He shows how diseases are generated; how fevers come; how this ailment is begotten; and how that springs from amidst special conditions. The first two books or parts of his work are really preparatory to the third.

Classifying diseases into "general diseases," or those affecting the body at large, and "local diseases," or those affecting a special part or organ, the author gives a clear summary of the nature of diseased or morbid actions. His book, in respect of its opening chapters, is a capital corrective to that by no means obsolete teaching which regards disease as the product of unknown conditions, which looks on a fever as a mysterious "visitation"—to use the stereotyped phrase—and which regards ailments, the causes of which are not clear to the popular mind, as the work of supernatural agencies. As a corrective to such notions, we repeat, Dr. Richardson's book will serve at once the cause of science and of common sense. The microscope has been at work for years, tracing this fever to its source, and that to its origin. We have been shown how foul conditions of air breed the germs of typhus fever, and how the malarious exhalations of swamps foster ague. Even consumption is being ranked with the diseases which date their origin from living particles, or "germs"; and thus the field of disease, from presenting us with an ill-assorted, mysterious series of ailments, is being parcelled out into its cultivated "plots" wherein the busy toilers of science are each working to increase the knowledge that prolongs life and secures length of days to our race.

That part of Dr. Richardson's volume which deals with "The Origins and Causes of Disease," and that which takes for its subject the "Practical Summary of Preventions of Disease," form together the most interesting portion of the work. In a fair and candid summary of the "Zymotic Causes of Disease," or of those causes which produce the well-known infectious and allied disorders, Dr. Richardson lays before the reader the chief facts, which seem to show that "germs," mostly of lower plant nature, breeding and multiplying within human tissues, produce each its own and special ailment. It is pretty well known that Dr. Richardson, personally, does not favour this theory of disease, which he calls the "parasitic" theory. His own view of such diseases he terms "the nervous hypothesis" (or theory) "which traces the zymotic affections to diseased secretions produced under nervous derangement in the body itself." In supporting this latter theory, Dr. Richardson has undertaken a task of no mean order; and it is a labour which, moreover, we cannot regard as susceptible of easy demonstration. Our author seems to regard the poison of disease as merely an altered or "modified secretion;" but the point which is insusceptible, in our opinion, of direct proof is exactly that which contains the gist of the whole matter, namely, the nature of the actions or conditions which modify the secretion. On Dr. Richardson's theory, as we understand it, these actions or conditions are chiefly represented by altered nervous states, but such a view leaves untouched the further question,

"What produces the nervous condition necessary in such case for the alteration of the secretion?" It would seem that we have still to fall back on some diseased material affecting the nerve centres, and through them capable of affecting the frame in each special case. But Dr. Richardson himself expresses his views so lucidly that in this matter we may let him speak for himself:—"On the ground," says our author, "that the virus, or poison matter of disease, is always from a secretion, I have been led to the conclusion that under certain influences affecting glandular action, *the virus may be made to originate directly through nervous impressions without the necessary intervention of an infecting particle.*" The special difficulties of Dr. Richardson's position are those, firstly, of showing the inactive characters of the microscopic germs (*bacilli*, &c.) which accompany disease, and which are capable of producing each its own disease when injected into the system of a healthy animal; and, secondly, of determining the, at present, somewhat shadowy character of the "influences" which affect the nervous centres, and so produce the diseases in question. It certainly seems a much simpler view of matters to assume that infectious diseases arise each from its own living germ; that the symptoms of the disease are the result of the development of that germ or germs into countless others within the system; and that the nervous or other "influences" of Dr. Richardson are simply the secondary results of the action of such germs. These views receive support from recent microscopic inquiry, and are accepted by most of our leading physicians and biologists as explanatory of the causes and origin of infectious diseases.

A highly-interesting section of Dr. Richardson's book is that which deals with "Industrial and Accidental Causes and Origins of Disease." A long and interesting list of ailments induced by the conditions under which certain trades and professions are pursued is given. Here we learn how the needle-grinders, potters, and others suffer from consumption; how cigar-makers are liable to irregular heart-action and indigestion; how the match-makers suffer from bone disease; how butchers are liable to contract poorness of blood and bronchitis; and how various other trades are similarly marked by their characteristic forms of disease. We learn that 111 butchers die to a mean of 100 of those who follow sixty-nine other occupations; and this high mortality is to be traced to the constant dampness of their surroundings, and to the consequent development of rheumatism, bronchitis, and other ailments. Again, 108 drapers die to seventy-six grocers; the latter probably owing their longer life to the freer atmosphere and more active work in which they are engaged. A vast amount of thought is suggested by these and allied considerations. They lead us to bestir ourselves in the matter, not only of the improvement of our surroundings, but also in legislating so that, as far as is practicable, insanitary conditions may be abolished in the practice of unhealthy or dangerous occupations.

The present work thus stands out prominently amongst books on popular science, not only by reason of the high importance of the subjects of which its author treats, but also from the interesting fashion in which he has collected, arranged, and described his facts. The book is one which teems with instruction of a kind which, when laid to heart, is much more likely than any other form of knowledge to incite people to study the laws of health, and to practise diligently those things which make for a healthy life. It is not by fear and terror that the modern sanitary reformer seeks to win adherents to the cause of healthy living. It is rather by showing us how much we may and can do to prevent disease that he would influence our lives and work. And in the instilment of such thoughts and views as part of a great national policy of health-pursuit, Dr. Richardson's work will, in our opinion, prove itself an ample aid, and supply information of the kind which may best be denominated "saving knowledge."

Sanitary Appliances, Etc.

COOK'S COMBINATION CINDER BIN AND SIFTER.

This is an ingenious arrangement, likely to prove of high practical value in household sanitation. There is no graver question for the householder than the disposal of the waste matter of the house, and the modern "dust-hole"—extant in cities where the refuse is not daily carted away by municipalities—will be regarded by sanitarians of the future as a proof of the backwardness of "the age we live in." Mr. Cook has contrived a handy bin on wheels, occupying any convenient position in household premises. A front lid being opened, gives access to a "cinder-sifter," which permits of sifting and removal of the cinders with great ease. When filled, the bin is simply wheeled off the premises by the dustman, and emptied of its contents by means of a sliding back. The price of this bin varies from £3. 15s. to £5. 15s. It may be obtained from the patentee, Mr. Cook, of 34, Snow-hill, London, E.C.

THE ESSEX FLOUR AND GRAIN CO.'S PREPARATIONS.

We have examined a sample of the Pure Flour of Lentils made by the Essex Flour and Grain Company, of Liverpool-road, London, N., and find it to be a pure and highly nutritious form of lentil food. It contains a high percentage of the nitrogenous matters (or flesh-forming foods) for which the lentil tribe are famous, and in the finely divided state in which the Essex Flour Company's preparation is presented digestion is rendered easy and assimilation rapid. This lentil flour can be mixed with ground rice or ordinary flour or other materials, and may in this form be made the basis of many excellent dishes. It is superior in purely nutrient qualities to the ordinary corn-flours.

From the same firm we have received a sample of "The Empress Currie Powder." This latter is an excellent article, and forms a valuable adjunct in culinary operations.

ROWLANDS' MACASSAR OIL.

We have received a sample of this well-known hair preparation, which is now manufactured in its original red colour, and is a golden fluid. It is not a dye, and the change of colour has been produced simply to suit the wishes of many persons who prefer a colourless hair-oil. From a chemical examination of this oil, we are able to speak with confidence of its high purity. It contains no deleterious matter, and is a preparation which is calculated to be of service in stimulating the growth of hair and in aiding recovery from hair-diseases in which there has existed an impairment of the vitality of the hair. At present there are a large number of hair preparations in the market which contain ingredients of doubtful nature. "Rowlands' Macassar Oil" is a pure and harmless preparation, compounded of excellent materials, and well-adapted for the toilet-purposes of old and young alike.

Wasp Waists.—We are not denying the necessity for some close-fitting garment as a support to the body, and an improvement to the figure; people who refuse to wear any corset at all look very slovenly; but we must protest against a machine that, pretending to be a servant, is, in fact, a tyrant—that, aspiring to embrace, hugs like a bear—crushing in the ribs, injuring the lungs and heart, the stomach, and many other internal organs. The Eastern lady who, pitied for her dull harem life, said she thought that English wives were far more unfortunate, since their husbands (as she innocently thought) "locked them up in a box," was not far wrong. And all to what end? The end of looking like a wasp, and losing the whole charm of graceful human movement and easy carriage—the end of communicating to all who, like artists and medical men, have studied the mechanism of the frame, an over-all-ish sense of deformity.—*Mrs. Haweis.*

Our Letter : Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including specimens of Sanitary Appliances, &c.), to be addressed to "The Editor of Health," 74-76, *Great Queen-street, London, W.C. Those intended for the Publishing Office to be sent to* "The Publisher," *at the same address.*

Contributors are requested to send stamps for the return of the MSS. *in event of non-acceptance. Every care will be taken to ensure the safety of* MSS., *but the* Editor *and* Publishers *cannot hold themselves responsible for accidental loss.*

Correspondents are requested to write on one side of the paper only. The Editor *disclaims responsibility for the opinions expressed by Correspondents.*

LETTERS TO THE EDITOR.

CHILDREN'S DRESS.

Sir,—Surely the conclusion arrived at by Miss Ballin as to the wearing of stays is not very commendable from a common sense point of view. She seems to think that, because skirts are heavy and fatiguing, it is, therefore, well to adopt another unhealthy garment—viz., a corset—to make them bearable. Two wrongs do not inevitably make one right, and the logical inference from the fact that skirts are uncomfortable, would be that they are an unsuitable form of dress, and should be altered to one which is more convenient.

I cannot agree to the theory laid down that those who do not wear corsets acquire a confirmed stoop. All stays contract the waist more or less. If they did not, they would not distribute the weight of skirts more evenly than bands. This contraction increases the slope towards the small of the back, and may give an impression of greater uprightness, but so far from really improving the carriage, they have a tendency to make people round shouldered, from the habit of leaning forward on the front steel. However, women's dress at present is designed to fit a pair of stays attached to a bottle-shaped wire stand, and the human being who is to carry it about is expected to alter her form so as to get into it. So long as women are content to do this, healthy and convenient clothing is impossible, and discussing it without advocating some completely different system seems of little use.

I must, however, mention that I read with astonishment, in Miss Ballin's otherwise excellent paper, the suggestion that little girls' dresses should be made to reach down to their ankles. Any advantage gained in the warmth of such a dress would be more than counterbalanced by the injury caused from the fatigue to the child when running about by the resisting weight or pressure against the legs of these long skirts. Any one who contrasts this proposed cumbrous dress with the graceful and convenient "Kindergarten Frock" just introduced by Miss Franks, of Mortimer-street, will have little doubt which is the more truly comfortable and hygienic dress for children.—I am, sir, yours faithfully,

119, Cromwell-road, S.W., *Jan.* 25. F. W. Harberton.

Sir,—Men may well be sceptical as to the reasoning powers of women when they read such an answer as that given by Miss Ballin to Mr. Maxwell relative to proper feet covering. Miss Ballin recommends for young girls a boot so constructed as not to allow "the foot to become deformed by spreading." Mr. Maxwell asks in reference to this advice, what are Miss Ballin's ideas as to the usefulness of a boot in preventing deformity of the feet? whether she thinks that people who do not wear boots or shoes at all have deformed feet? and whether she thinks the application of any tight-fitting article of attire, such as corsets, prevent young ladies' figures from becoming deformed? Miss Ballin's reply—answer it can hardly be called—is a curious study in many respects, but what she supposes to be an answer is, that as the feet have to bear the whole weight of the body, while "the figure" has not, *therefore* the feet ought to be prevented from becoming deformed—*i.e.*, from spreading.

It does not seem to have occurred to Miss Ballin that the fact of the feet having to sustain the whole weight of the body entirely proves Mr. Maxwell's point and disproves her own. As the feet have to bear all the weight of the body, it is necessary for them to spread in order the better to sustain it, and as this spreading of the foot when treading is "the wise provision of nature" for the better support of the body and its locomotive powers, this same spreading cannot be a deformity, but, on the contrary, the foot which has lost this power is alone the deformed one.

During my residence in New Zealand I had full opportunity of seeing hundreds of natural feet, which had never been cramped by shoes or boots; deformed they certainly were not, but the shape of the foot, with its broad, natural "spread" across the toes, was very different from that of the shoe-wearing peoples.

With our unnatural taste as to the shape and size of both feet and waists, how can we rightly judge which is the deformed and which the symmetrical foot or waist? Let us apply, as a test, Miss Ballin's own quotation, "In bringing up a child, think of its old age." And I think the natural foot and the natural figure will last best both as to beauty and as to health.

I agree with Miss Ballin as to the greater number of stooping girls to be seen nowadays. And there are two very patent causes to account for it. One is the mistaken advice followed by many women, of putting all the weight of petticoats on the shoulders. The weak backbone, and undeveloped muscles, not able to sustain the burden put upon them, droop and collapse. The backbone becomes curved and the chest sunken. Another reason is, that we are giving our poor girls too much higher education of the mind, and too little higher education of the body. No wonder they stoop, poor things, when their vital power is sapped to work their brains, while no invigorating games are allowed them, which would relieve the constant mental strain, and enable them to regain the physical energy which mental labour robs them of.

For heaven's sake let us get women with healthy vigorous bodies and a healthy, unfettering dress, before we pursue further this system of brain torture.

Dr. Clouston's warning on this head comes none too soon. I greatly fear me that if women teachers of women study the question of dress and health, from no higher standpoint from that which Miss Ballin takes, such an institution as that so nobly bequeathed to them by Mr. Holloway will prove a curse instead of a blessing. E. M. King.

Hon. Sec. Rational Dress Association, 9, Trinity-road, Folkestone.

BUCHAN'S PATENT INDUCTED-CURRENT FIXED VENTILATORS.

Sir,—In the notice of the above appliances which you were kind enough to honour me with on page 236, it is stated that the No. 7 style, Fig. 4, was being applied on the new hospital at Morningfield, Aberdeen. It is the No. 9 style that have been put on there. The No. 7 style were used for the Alloa Volunteer Drill Hall, 27 in. size, and the architects, Messrs. John Melain & Son, Alloa, write me to-day that "they are the best design of roof ventilators we have yet seen, and we understand they have worked well."—I am, yours respectfully, W. P. Buchan.

QUERIES AND ANSWERS.

We would direct the attention of our correspondents to the fact that, owing to the necessity for sending Health to press early in the week, answers to queries cannot, as a rule, appear in the succeeding number of the journal. Every effort is made to secure punctuality in the replies, but we must ask the occasional indulgence of our readers, owing to the large amount of correspondence, which requires assortment and reply.

We must also request correspondents who write enclosing stamps for copies of Health, to address their inquiries to the Publisher, *and not to the Editor.*

Correspondents will please note that Queries addressed on Postcards are consigned to our waste-paper basket. If information is worth having, it is at least worth a letter.

We beg to announce to our correspondents that, save in exceptional cases, or where addresses of medical men, &c., are desired, we cannot reply to inquiries by letter.

GENERAL.

Talisker.—Probably one fourth; certainly not more.

A. C. X.—There is no such substance. Have you not mis-spelt the name?

Andersonian.—The College has no power to give degrees; only a chartered University can do so.

B. Olston.—Teeth grow from the gum, and the gum is only a modification of the skin. Hence teeth are related to hairs and nails, and not to bones.

C. Cargill.—You will find the full account of Mr. Syme's experiment on the periosteum (quoted by Dr. Wilson in his lecture on the Skeleton) in Syme's "Principles of Surgery."

X. O.—We suspect there must be some hereditary tendency. Read Ribot's "Heredity" (Kegan Paul, Trench, & Co.), for a full account.

BENE.—"Chapters on Evolution," by Dr. Andrew Wilson (Chatto & Windus), contains a popular account of the information you require.

YORK ROAD.—Unsuited for HEALTH.

GEORGE R.—Yes; there is such an ailment as "Caisson-disease." It was carefully described by Dr. Andrew Smith, of New York. It is also called "coffer-dam" disease, and affects men employed in sinking the great caissons, or tubes, used in bridge-building. It is marked by pains in trunk and limbs, and by paralysis, &c., and is due to the increased atmospheric pressure under which the men work. See Richardson's "Field of Disease," page 538.

A. A. THOMSON.—Thanks for note. Mistake so obvious as not to need correction.

J. E. LUSH.—Probably Mr. York, of Lankester-road, Notting-hill, W., will be able to supply you with the slides you require, but there is no complete set on the skeleton that we know of. We might recommend you to purchase Dr. Wilson's "Standard Physiology," price one shilling, published by Messrs. Chambers, as a cheap elementary work, such as you require.

ARTHUR E. HAWKINS.—The book by Pye Chavasse might suit you. Messrs. Cassell & Co. also publish a reliable work, entitled the "Ladies' Physician," which might suit your purpose.

MEDICUS.—See recent numbers of *Lancet* for letters on capital punishment. There is no volume we know of which will suit your purpose, but you might find in "Hansard's Debates" reports of the speeches by Mr. Bright and others in Parliament advocating the abolition of capital punishment.

SANITARY.

CECIL.—Have the flooring taken up, and be sure there is no leaking drain beneath your room.

A. ARMSLEY.—A very good book; none better for your purpose.

J. BENSON.—1. Try what the removal of one or two bricks will do. 2. Increase width of fireplace.

G. C. A.—We never heard of the invention. Can you send us details?

BIRMINGHAM.—There is a firm of that name; but we are not acquainted with their manufactures.

ALPHA.—The "burners" in our hands act well.

BRUCE.—1. The statement will be found in Parkes's "Hygiene." 2. See "Notes by the Way," No. 42.

J. S.—1. We should recommend you to raise the bottom sash of the window three or four inches, and to fill up the space by a block of wood, on which the lower sash thus rests. By this plan fresh air passes in between the two sashes, without draught. See "Sanitary Gossip" in present number. 2. The Bramah Closet is a good one, but you had better read the articles published in HEALTH, under "Healthy Houses," on "Closets."

MEDICAL.

EATON PLACE.—Let your food be very light for a time; live mostly on soups, milk, &c., and take little solids for some days. Brand's "Beef Essence" and similar preparations may be recommended as highly nutritious. Take a little "Pepsine" along with your food; and guard carefully against constipation. In this way your stomach will recover tone. Give up tea and coffee.

WILLIAM.—Yes; you will grow yet, always provided you are well nourished, and take plenty of exercise, but not so as to overdo your strength. Your diet should be generous, but not over-stimulating. Remember, however, that physical constitution is inherited, and you may come of a short race. "Growth" is favoured by exercise stimulating the demand for food.

J. G. CLARE.—See and follow advice to "Eaton Place" above.

HARRY.—Take a teaspoonful of Fellows' "Syrup of the Hypophosphites" in a wineglassful of water (before meals), thrice daily. Let your diet be generous, and have no fears. At your age, you should be in the prime of life. You require more open-air exercise, and this, with the above tonic, will restore your health.

PORTOBELLO.—"Congestion" is the preliminary stage of all inflammations. Pneumonia, or inflammation of the lungs, is certainly as common now as ever.

ARGUS.—A black dye is made by dissolving from 10 to 20 grains acetate of lead in an ounce of water. This is applied to the hair, and, when dry, the hair is wetted with a solution of sulphide of ammonium. The darkness of the tint corresponds to the amount of lead used in the first solution. This dye cannot be used for any time without producing ill-effects, however. [All lead-dyes are dangerous, more or less.] A strong tincture of the shells or coverings of green walnuts is a safer recipe.

BENDBOW.—See advice to "William" above.

PROLAPSUS.—No danger at all; only guard carefully by diet against constipation. You might try for a time a teaspoonful thrice daily of a mixture consisting of tincture of hamamelis one teaspoonful added to eight ounces of water.

DEPRESSED.—Make a trial of the tonic recommended to "Harry" above, and let us hear how you are thereafter. You are evidently over-anxious about yourself.

M. N. O.—If the drum of your ear is perforated you must have treatment by an ear-surgeon. No local remedies are of much service in such a case. See to your general health thoroughly; but yours is a case for surgical advice, such as you have apparently had.

ONE IN AFFLICTION.—You have been exceedingly foolish in not consulting a surgeon. Cases like yours occur every day. We should advise you to use weak injections of Condy's Fluid and water (1 part to 10 or 15 of water), but a consultation with a surgeon is eminently needed in your case, as there are evidently other symptoms present which demand treatment.

W. SAMUEL.—Are you sure you are not overworked? Rest as much as possible. For a time (as recommended to "Eaton Place" above) let your food be very light. Take a little "Æsculap" occasionally in the morning as a mild aperient. After trial of our advice, as indicated, let us hear how you are. Yours seems a case for the regulation of diet.

A POOR PARSON.—Make trial of advice given to "Eaton Place" above. You will improve, if you first begin the treatment by giving your stomach rest, and by taking only rich soups, &c., for a time, this will be accomplished. A little "Pepsine" with the food will be desirable. You are, of course, a nervous subject, and this must be taken into account. If you require a blood tonic, take 15 drops *Fer Bravais* thrice daily in water. Glad to be of any further service.

ONE IN EARNEST.—For pimples try the following pills:—Sulphide of lime, 2 grains; sugar of milk, 40 grains; make into 20 pills, and take one every three hours for some days. Dust the face also daily with the following lotion:—Flowers of sulphur, a teaspoonful; glycerine, 2 tablespoonfuls; rose water, half-a-pint. Mix as a mild aperient; try "Æsculap" water occasionally in the morning.

UNSETTLED.—No need, so far as we see, for you to be anxious. You may take the step without fear. If below par, take the tonic recommended to "Harry" above for a short time.

BETA.—You require (1) care in food taking (avoid tea, coffee, and malt liquors); (2) to take the following: Bicarbonate of potash, 10 grains; bicarbonate of soda, 10 grains; ginger, 5 grains; calumba (in powder), 5 grains; mix. One such powder thrice daily, half-an-hour before meals.

PEDAGOGUE.—You might try the effect of inhaling the vapour of a pint of boiling water, to which have been added ten drops of tincture of iodine. Inhale thrice daily, at the rate of six inspirations per minute, and avoid cold or chill thereafter. What you suffer from is only a symptom of your health being below par. The tonic recommended to "Harry" above will be your best restorative.

JOSEPH BROWN.—Are you aware that "scald head" in a child is not to be cured in a day? You must persevere, and not fly to one remedy after another before any result can be expected. The disease is often of constitutional origin, and we repeat your sheet-anchor should be cod-liver oil. Try an ointment composed of oil of cade, 2 drachms, and glycerine of starch to make up one ounce. Attend to cleanliness strictly.

H. T. W.—1. All in good time. We purpose treating the topic you name. 2. Good whisky well diluted with cold water is as safe as any in such a case. 3. Dumb-bell exercise in the morning.

ESPÉRANCE.—You cannot hope to get well if you disregard the first step in your eating and drinking. Use an injection morning and night of Condy's Fluid (1 part to 10 of water) and continue the tonic. It is only a matter for improvement of your general health. Avoid all stimulants, beer especially.

CELIA.—Such irregularities are usually due to overwork, or too much standing. Try to rest (in the recumbent position) as much as possible, and take 10 drops *Fer Bravais* thrice daily for a time. Let us hear how you are after a trial of this advice. See to your general health.

TROUBLED M.—Probably some constitutional weakness of skin. See to your health, and take a little cod-liver oil occasionally during the winter. Avoid chills above all.

T. P. B.—The cause is due to some disturbance of health—usually overwork, worry, &c. The great remedy in such cases is rest in the recumbent posture, with care and attention to the general heath. A change of air is often a means of restoration. If not better, write again, giving fuller details.

A. BAILEY.—See and follow advice given above to "Harry." Cold sponging each morning may also do you good, if you have sufficient reaction afterwards.

LEONIE.—Yours is a case in which you must make a difference or change in your food. Try a vegetable dietary; or eat fruits (apples,

&c.) regularly after breakfast and dinner, and try stewed prunes, &c., as a dinner dish. Your sheet-anchor is your food, not aperients.

Horatio.—A common and troublesome affection. As a first measure, try washing with Cleaver's Terebene Soap frequently, and thereafter anoint the part with a little Vaseline—carbolated Vaseline may be tried. If not better, write again.

J. Muir.—See to your general health. Let your food be nourishing, but avoid all stimulants. Try the lime pills recommended to "One in Earnest," in present No. of Health. The symptoms of heating and cooling will disappear when your general health is well established. They are only a sign of a little weakness. Try a tonic—say, *Fer Bravais*, fifteen drops, thrice daily, in water.

Weipers.—1. Varies with the constitution of the individual. If hard at work and healthy, about twice weekly. 2. Depends on reaction; try the bath very slightly tepid. 3. Cold plunge is a more violent form than the sponge bath.

Ajax.—Try a teaspoonful of Fellows' "Syrup of the Hypophosphites" thrice daily before meals, in a wineglassful of water. As a good tonic (which you evidently require) this will probably cure you. If not cured, write again.

Edith.—In your case there is evidence of general debility, produced, no doubt, in the first instance, by dyspepsia. We concur heartily in your view that a change to the sea would do you good. Secondly, for a time your food should consist simply of nourishing soups, beef essences, &c., so as to give the digestive system a rest in digesting light foods. You might try fruits also, avoiding all constipation, of course. See what change of air will accomplish, and write again.

T. W. R.—We have no special knowledge of your locality in the matter you name. Better to try some good meal-dealer in your nearest large city. He will be certain to furnish you with the flour. Let us know again if not able to procure the flour.

S. S.—1. Try the following for the hair:—Balsam of tolu, 2 drachms; oil of rosemary, 20 drops; tincture of cantharides, 1 drachm; castor oil, ½ oz.; prepared lard, 1½ oz. Rub in night and morning to the roots. 2. Braces alone won't keep the shoulders back. Wear a loose, easy brace like the "Argosy," and correct the stooping by dumb-bells. Special braces for stooping are sold at indiarubber depôts.

Kino.—We should not advise the Sp. Vin. Rect. It is too crude, and you do not get in it the ethers, &c., you will obtain from a good wine. We should say try a good port from the wood; in our experience a good claret is preferable. Can we assist you further?

Scoty.—See advice to "Leonie" above. The pills named do not, in our opinion, differ from ordinary aperient pills.

Grammar.—The phrase "nervous constitution" is usually applied to a phase of physical life in which there exists a natural excitability of disposition, and wherein a person is easily excited or alarmed. There is no actual disease, or even abnormality, involved in such a case. What is called a "sanguine" temperament is often named a "nervous temperament" as well.

Edith Triplet.—The hair will likely return to its natural hue if the wash is left off. Possibly it will, for a time, be lighter in colour than before. There is only one "peroxide of hydrogen" known, and in your friend's case it has acted, as usual, by bleaching the hair. There is no preparation to darken grey hair readily (as a dye) which does not contain lead. Try "Rowlands' Macassar Oil" (the pink colour); this will likely darken the hair if used frequently. The peroxide of hydrogen used as a hair application will in time destroy or weaken the hair.

F. J. Young.—Yes; may be taken safely. It is analogous in its action to coffee. You might try the "Vina Coca" as a readily-obtained preparation.

R. T. L.—Write out the prescription plainly. Say whether it is English or foreign, and we will decipher it for you. As you send it, we cannot definitely answer your query.

Peet-e-Weet.—1. Use a little plain Vaseline for the forehead. See that your diet is not too low. Try the effect of a little rich meat soup. The whitlows are indicative that your system is low. 2. We do not know to which "Dr. Mackenzie," or to which "throat-lecture," you refer.

C. M. T.—A teaspoonful twice or thrice daily. Try a gargle composed of one drachm biborate of soda and 2 oz. of glycerine. See to your general health, and try a tonic.

A. Harvey.—1. Yes: hot salt-water baths. Veins never "pulsate" as you say. Describe the symptoms in the wrist more fully. Any pulsation you see there is that of an artery, which is quite natural. Rub the painful part with hot oil.

Rose.—Look carefully to your digestion; avoid tea and coffee and all stimulants; food to be simple, but light and nourishing (soups, puddings, &c.) for a time. Try the following:—Rhubarb in powder, 4 grains; pepsine, 3 grains. Mix. To be taken after meals. Glad to be of further service.

Countryman.—1. Take the tonic recommended to "Ajax" in present No. for a time. 2. Sleep on a hard mattress. 3. Take no fluids late at night. 4. Use cold sponging each morning. 5. Take open-air exercise. 6. Above all, cultivate a cheerful frame of mind, and know that you suffer from no disease, but only a little weakness, of which you can be readily cured as above.

Roderick.—1. No, a quack. 2. You are quite well; nobody troubles about such ailments; you are needlessly excited about yourself. 3. Not at all. 4. Follow advice to "Countryman" above, and let us hear how you are in a week or two. Avoid quacks in future.

Pembury.—You want (1) a change of air at the sea; 2. Rest from business for a time; 3. A tonic such as that recommended to "Ajax" in present Number. The change of air will do you more good than all the drugs you may take. Follow our advice in this respect if you are wise.

A Foreigner.—Try the following: Carbonate of ammonia, one drachm; bicarbonate of potass, one and a-half drachms; infusion of chiretta, 6 ounces. A tablespoonful thrice daily before meals. You suffer chiefly from dyspepsia or indigestion. Regulate your diet thoroughly. Food to be light (avoid tea and coffee for a time) but nourishing.

A Subscriber.—Eclampsia (not "Eclampsy") is the name given to a form of convulsions caused by interruption to the functions of the kidneys.

M. A. A.—Try the effect of cold-sponging to the parts, and of the tonic recommended to "Ajax" in present number.

Senex.—No need to fear. See our papers on "Hydrophobia." A healthy dog can never communicate this disease to man. It is only a "rabid" animal that can do so.

G. Mitchell.—In such a case as yours, involving difficult questions respecting the eyes, and necessitating examination of the eyes for the formation of an opinion worth having, we recommend consultation with your oculist. He alone is the judge of such a case; and you will be able on reflection to see that what we say is only in accordance with common sense. Any advice given by us or any other person under the circumstances would be worthless.

Z. B.—"Torticollis" is "wry neck." May be due to a variety of causes.

Cruas (or Oroas).—(Your signature is indistinct.) We should recommend you, as a first measure, to try the mixture prescribed to "A Foreigner" in the present number of Health. Glad to be of further service.

P. R.—1. No objection to using almond oil. 2. Try the hair preparation recommended to "S. S." in present number.

F. W. B.—In winter if a lack of warmth is experienced the person ought to sleep in a flannel nightgown. 2. Warm bath twice a week cold; to be rigidly guarded against thereafter. 3. Suggestion about liver paper useful.

A Cardiff Subscriber.—We advise you to try the effect of a dessertspoonful of cod-liver oil, taken thrice daily after food. You are evidently in want of some general strengthening medicine. Let your food be light and nourishing. Avoid quacks and herbalists.

S. W. F.—You did not enclose a stamped envelope. If you will do so we shall be glad to recommend a specialist in skin diseases.

Anxious.—See and follow advice given to "Countryman" in present number of Health. Don't be morbid, as by attention to advice you will get quite well. Let us hear how you are in a few weeks.

James Ross.—The prescription given to "A Foreigner" in present number might be tried. Let us hear the result. Glad to be of further service.

A Shopkeeper.—We recommend you to apply a little pure Vaseline, constantly, to the part. Possibly a little Carbolated Vaseline might be used instead of the plain. Attend to your general health, and a little iron—say ten drops *Fer Bravis* thrice daily in water—will assist your cure.

W. S.—Try the following prescription:—Iodide of potass, two drachms; infusion of calumba, six ounces. A dessert-spoonful thrice daily. This to be taken at intervals for some months.

Arabella.—There seems to be some indication of bone weakness in the child. You must attend very carefully to its food. Cod-liver oil should be given either internally or rubbed into the arm-pits. Rest on a firm, smooth mattress is advisable. But please note that the case is one which should be watched carefully by a medical man.

A Mother.—Treatment of such a fever is best left to a medical man. But by way of prevention, the health of the children should be carefully looked to, as well as the ventilation of the house; while disinfectants, such as Sanitas fluids and powders, should be used in all the closets of the house.

Diamond.—Try the hair-lotion recommended to "S. S." in present number. Such symptoms are often an indication of general health being out of order. The small-tooth comb is not required either for children or adults where attention is paid to the cleanliness of

[*Continued on page* 304.

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A Student.—You are overworking yourself, and your symptoms indicate that you would be the better for rest, and taking a desert-spoonful of cod-liver oil thrice daily after food.

Ægrotat.—Either of the preparations you name is adapted for your case. In reference to stimulants, it is better to try the experiment of seeing whether total abstinence is not preferable to stimulants.

David Denison.—Try the following:—Carbonate of ammonia, 1 drachm; tincture of squills, 3 drachms; compound tincture of camphor, half an ounce; infusion of senega to make up 6 oz. A table-spoonful every four hours. You might also try the effect of cold sponging the chest in the morning and brisk friction thereafter.

Rufus.—Why do you not use a sponge and water instead of licking the stamps? You are liable to contract serious disease by your present practice. Try the effect of a vegetable dietary and of eating fruits, &c., as a cure for constipation.

Constant Reader (will please use some more distinctive name in future). You have been needlessly alarmed by the quacks you have consulted. Use cold sponging, and wear a suspensory bandage.

George Burton.—Your case is eminently one for a vegetable dietary, which will obviate any necessity for aperients, and probably also relieve the symptoms of which you complain. You are evidently overworking yourself, and this may account for your present troubles. Use plain Vaseline as an application to the irritated parts.

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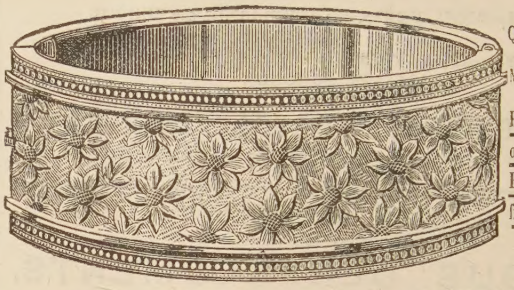

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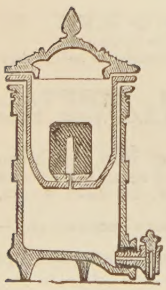

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